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Sun StorageTek™ PCI Express Enterprise 4 Gb FC Host Bus Adapters Emulex Installation Guide

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Contents

Preface

This guide describes how to install the Sun StorageTek™ Enterprise PCI Express 4 Gb Fibre Channel (FC) Single and Dual Port Host Bus Adapter (HBA). It also explains how to update the driver.

How This Book Is Organized

The single chapter describes how to install the HBA and update the driver.

Appendix A provides the safety, regulatory, and compliance information for the product.

Using UNIX Commands

This document does not contain information about basic UNIX® commands and procedures such as booting the system, shutting it down, and configuring devices. Refer to the following for this information:

■ Software documentation that you received with your system

■ Solaris™ Operating System documentation, available at:

  `http://docs.sun.com`

Shell Prompts

Shell	Prompt
C shell	*machine-name*%
C shell superuser	*machine-name*#
Bourne shell and Korn shell	$
Bourne shell and Korn shell superuser	#

Typographic Conventions

Typeface[*]	Meaning	Examples
`AaBbCc123`	The names of commands, files, and directories; on-screen computer output	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
`AaBbCc123`	What you type, when contrasted with on-screen computer output	`%` **`su`** `Password:`
AaBbCc123	Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values.	Read Chapter 6 in the *User's Guide*. These are called *class* options. You *must* be superuser to do this. To delete a file, type `rm` *filename*.

[*] The settings on your browser might differ from these settings.

Related Documentation

Application	Title	Part Number
Latest information	*Sun StorageTek PCI Express Enterprise 4Gb FC Host Bus Adapters Emulex Release Notes*	819-4811-xx
Locating documents	*Accessing Documentation*	819-1209-xx

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```
http://www.sun.com/hwdocs/feedback
```

Please include the title and part number of your document with your feedback:

Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex Installation Guide, part number 819-4810-10

Installing, Connecting, and Testing the Host Bus Adapter

This guide describes how to install and configure your new Sun StorageTek™ PCI Express Enterprise 4 Gb Fibre Channel (FC) Single and Dual Port Host Bus Adapter (HBA). The HBA is also referred to as SG-XPCIE1FC-EM4 (single port) or SG-XPCIE2FC-EM4 (dual port).

It contains the following topics:

- "System Requirements" on page 1
- "Installing the HBA" on page 2
- "Installing the HBA Driver with the Solaris 10 OS" on page 14
- "Sun Product Information Page at Emulex" on page 15
- "Diagnostic Support" on page 16

Caution – Be sure to keep the Sun StorageTek PCI Express Enterprise 4 Gb FC Single and Dual Port HBA in the antistatic bag until installation. The HBA contains parts that can be damaged by electrostatic discharge (ESD). Before handling the HBA, use standard methods to discharge static electricity. Place the HBA on the bag when examining it. Retain the bag for future use.

System Requirements

Your system must have at least one PCI Express 4-lane slot to support the Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex.

Installing the HBA

Follow these steps to install the Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex in your system:

- "To Verify the Packaging Contents" on page 2
- "To Install the HBA Hardware" on page 3
- "To Attach the Optical Cable" on page 5
- "To Apply Power" on page 7
- "To Verify Proper Installation in SPARC Platforms" on page 7
- "To Verify Attached Storage to the Installed HBA" on page 12

▼ To Verify the Packaging Contents

Verify that the Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex is shipped with the following items (see FIGURE 1):

- Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex
- Extra PCI bracket
- *Accessing Documentation*, 819-1209-*xx*
- Antistatic wrist strap
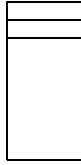
Antistatic wrist strap   Accessing documentation   Extra PCI bracket

Sun StorageTek PCI Express 4 Gb FC Emulex HBA

FIGURE 1   HBA Package Contents

▼ To Install the HBA Hardware

To install the Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex, you need to open the computer and identify an empty PCI Express 4 lane slot. If necessary, consult your computer system manual for instructions to remove the computer cover.

1. Record IEEE and serial numbers.

Each HBA is shipped with a unique 64-bit identifier called the *IEEE address.* The Fibre Channel industry uses a World Wide Name (WWN) derived from the IEEE address matched to an FC port. This number is needed for FC connectivity.

The single channel SG-XPCIE1FC-EM4 will have one IEEE address, the dual channel SG-XPCIE2FC-EM4 will have two IEEE addresses. The IEEE address is used when configuring your system. The serial number is used when communicating with Sun. All numbers are clearly marked on the board. Record these numbers before installation.

2. **Shut down, power off, and unplug the computer.**

3. **Remove the computer case.**

4. **Remove the blank panel from an empty PCI Express slot.**

5. **(Optional) Perform the following steps to replace the PCI bracket.**

Note – The HBA comes with a low-profile PCI bracket installed. This bracket is approximately 3.11 in. (7.9 cm) long. A standard mounting bracket, which is approximately 4.75 in. (12.6 cm), is provided with each X-option order.

---

a. **Remove the mounting bracket screws from the HBA (see** FIGURE 2**).**
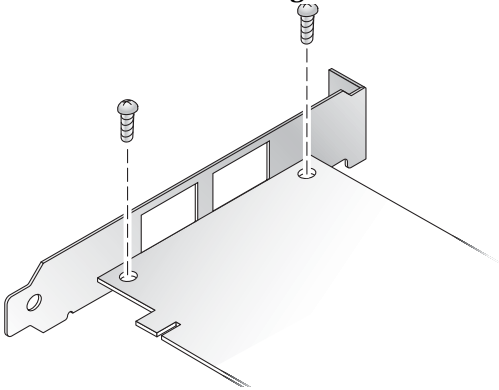
FIGURE 2   Removing the Bracket Screws

b. **Remove the bracket and store it for future use.**

c. **Align the new mounting bracket tabs with the holes in the HBA.**

Note – Be careful not to push the bracket past the transceiver housing's grounding tabs. Ensure that the LEDs are properly aligned with the holes in the bracket.

---

d. **Replace the screws that attach the HBA to the bracket.**

6. **Insert the HBA into the empty PCI Express 4-lane slot. Press firmly until the adapter is seated.**

7. **Secure the HBA's mounting bracket to the case with the panel screw or clip.**

8. **Replace the computer case and tighten the case screws.**

   The HBA is now installed in the computer and is ready for the optical cable attachment.

▼ To Attach the Optical Cable

Note – The HBA does not allow normal data transmission on an optical link unless it is connected to another similar or compatible Fibre Channel product (that is, multimode to multimode).

Use multimode fiber-optic cable, intended for short-wave lasers, that adheres to the specifications in TABLE 1.

TABLE 1　Optical Cable Specifications

Fiber-Optic Cable	Maximum Length	Minimum Length	Connector
62.5/125 μm (multimode)	300 meters at 1.0625 Gbit/sec 150 meters at 2.125 Gbit/sec 70 meters at 4.25 Gbit/sec	2 meters	LC
50/125 μm (multimode)	500 meters at 1.0625 Gbit/sec 300 meters at 2.125 Gbit/sec 150 meters at 4.25 Gbit/sec	2 meters	LC

TABLE 2 summarizes the LED status conditions.

TABLE 2　LED Status

Green LED	Yellow LED	State
Off	Off	Wake-Up Failure (Dead Board)
Off	On	POST failure (Dead Board)
Off	Slow Blink	Wake-Up Failure Monitor
Off	Fast Blink	Failure in POST
Off	Flashing	POST Processing in Progress
On	Off	Failure While Functioning
On	On	Failure While Functioning
On	1 Fast Blink	1 Gb Link Rate – Normal, Link up

TABLE 2   LED Status *(Continued)*

Green LED	Yellow LED	State
On	2 Fast Blinks	2 Gb Link Rate – Normal, Link up
On	3 Fast Blinks	4 Gb Link Rate – Normal, Link up
Slow Blink	Off	Normal – Link Down
Slow Blink	On	Not Defined
Slow Blink	Slow Blink	Off-line for Download
Slow Blink	Fast Blink	Restricted Off-line Mode (Waiting for Restart)
Slow Blink	Flashing	Restricted Off-line Mode, test active
Fast blink	Off	Debug Monitor in Restricted Mode
Fast blink	On	Not Defined
Fast blink	Slow Blink	Debug Monitor in Test Fixture Mode
Fast blink	Fast Blink	Debug Monitor in Remote Debug Mode
Fast blink	Flashing	Not Defined

When attaching the optical cable, be sure to:

1. Connect the fiber-optic cable to an LC connector on the HBA (see FIGURE 3**).**
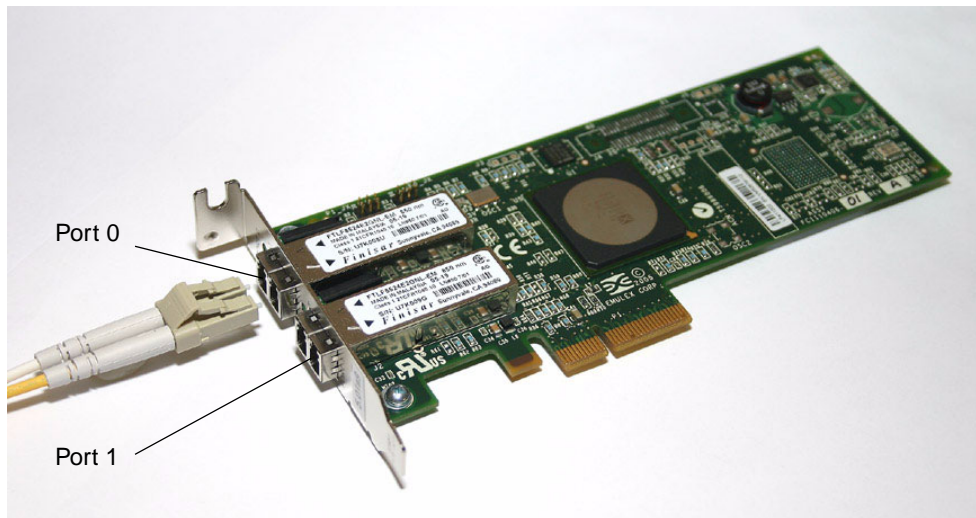
FIGURE 3   Attaching the Optical Cable

2. Connect the other end of the cable to the Fibre Channel device.

After the optical cable is connected to the HBA, you are ready to apply power to the computer.

▼ To Apply Power

1. **Verify that the HBA is securely installed in the computer.**

2. **Verify that the correct optical cable is attached.**

3. **Plug in and power on the computer.**

4. **Observe light-emitting diodes (LEDs) for POST results.**

   Yellow, green, and amber LEDs can be seen through openings in the HBA's mounting bracket. Each port has a corresponding set of yellow, green, and amber LEDs.

▼ To Verify Proper Installation in SPARC Platforms

1. **Enter the** `show-devs` **command at the** `ok` **prompt to list the installed devices.**

   The HBA can be identified in the output containing the `SUNW,emlxs@n` and `SUNW,emlxs@n,1` node names, where *n* is usually a single-digit number from 0 to 9.

2. **To positively identify the port as a Sun StorageTek 4 Gb FC port, cd to the SUNW,emlxs@N entries and enter** `.properties` **as shown in the example that follows.**

In the following example, there are two Dual Channel SG-XPCIE2FC-EM4 and one single-channel SG-XPCIE1FC-EM4 adapters installed:

```
{0} ok show-devs
/pci@7c0
/pci@780
/cpu@1b
/cpu@1a
/cpu@19
/cpu@18
/cpu@17
/cpu@16
/cpu@15
/cpu@14
/cpu@f
/cpu@e
/cpu@d
/cpu@c
/cpu@b
/cpu@a
/cpu@9
/cpu@8
/cpu@7
/cpu@6
/cpu@5
/cpu@4
/cpu@3
/cpu@2
/cpu@1
/cpu@0
/virtual-devices@100
/virtual-memory
/memory@m0,800000
/aliases
/options
/openprom
/chosen
/packages
/pci@7c0/pci@0
/pci@7c0/pci@0/pci@9
/pci@7c0/pci@0/pci@8
/pci@7c0/pci@0/pci@2
/pci@7c0/pci@0/pci@1
```

```
/pci@7c0/pci@0/pci@9/SUNW,emlxs@0
/pci@7c0/pci@0/pci@9/SUNW,emlxs@0/fp@0,0
/pci@7c0/pci@0/pci@9/SUNW,emlxs@0/fp@0,0/disk
/pci@7c0/pci@0/pci@8/SUNW,emlxs@0,1
/pci@7c0/pci@0/pci@8/SUNW,emlxs@0
/pci@7c0/pci@0/pci@8/SUNW,emlxs@0,1/fp@0,0
/pci@7c0/pci@0/pci@8/SUNW,emlxs@0,1/fp@0,0/disk
/pci@7c0/pci@0/pci@8/SUNW,emlxs@0/fp@0,0
/pci@7c0/pci@0/pci@8/SUNW,emlxs@0/fp@0,0/disk
/pci@7c0/pci@0/pci@2/network@0,1
/pci@7c0/pci@0/pci@2/network@0
/pci@7c0/pci@0/pci@1/pci@0,2
/pci@7c0/pci@0/pci@1/pci@0
/pci@7c0/pci@0/pci@1/pci@0,2/LSILogic,sas@2
/pci@7c0/pci@0/pci@1/pci@0,2/LSILogic,sas@2/disk
/pci@7c0/pci@0/pci@1/pci@0,2/LSILogic,sas@2/tape
/pci@7c0/pci@0/pci@1/pci@0/ide@8
/pci@7c0/pci@0/pci@1/pci@0/usb@6
/pci@7c0/pci@0/pci@1/pci@0/usb@5
/pci@7c0/pci@0/pci@1/pci@0/isa@2
/pci@7c0/pci@0/pci@1/pci@0/ide@8/cdrom
/pci@7c0/pci@0/pci@1/pci@0/ide@8/disk
/pci@7c0/pci@0/pci@1/pci@0/usb@6/hub@1
/pci@7c0/pci@0/pci@1/pci@0/isa@2/serial@0,3f8
/pci@780/pci@0
/pci@780/pci@0/pci@9
/pci@780/pci@0/pci@8
/pci@780/pci@0/pci@2
/pci@780/pci@0/pci@1
/pci@780/pci@0/pci@8/SUNW,emlxs@0,1
/pci@780/pci@0/pci@8/SUNW,emlxs@0
/pci@780/pci@0/pci@8/SUNW,emlxs@0,1/fp@0,0
/pci@780/pci@0/pci@8/SUNW,emlxs@0,1/fp@0,0/disk
/pci@780/pci@0/pci@8/SUNW,emlxs@0/fp@0,0
/pci@780/pci@0/pci@8/SUNW,emlxs@0/fp@0,0/disk
/pci@780/pci@0/pci@1/network@0,1
/pci@780/pci@0/pci@1/network@0
```

```
/virtual-devices@100/led@d
/virtual-devices@100/explorer@c
/virtual-devices@100/sunmc@b
/virtual-devices@100/sunvts@a
/virtual-devices@100/fma@9
/virtual-devices@100/echo@8
/virtual-devices@100/loop@7
/virtual-devices@100/loop@6
/virtual-devices@100/ncp@4
/virtual-devices@100/rtc@3
/virtual-devices@100/nvram@3
/virtual-devices@100/console@1
/openprom/client-services
/packages/SUNW,asr
/packages/obp-tftp
/packages/kbd-translator
/packages/dropins
/packages/terminal-emulator
/packages/disk-label
/packages/deblocker
/packages/SUNW,builtin-drivers
{0} ok
```

The following `.properties` output shows the properties of the two ports in one of the dual port adapters.

```
{0} ok cd  /pci@7c0/pci@0/pci@8/SUNW,emlxs@0
{0} ok .properties
assigned-addresses      82080010 00000000 03500000 00000000
00002000
                   82080018 00000000 03502000 00000000 00002000
                   81080020 00000000 00003000 00000000 00000100
                   82080030 00000000 03540000 00000000 00040000
port_wwn                10 00 00 00 c9 4b 3b 38
node_wwn                20 00 00 00 c9 4b 3b 38
alternate-reg           01080020 00000000 00000000 00000000
00000100
reg                     00080000 00000000 00000000 00000000 00000000
                   03080010 00000000 00000000 00000000 00001000
                   03080018 00000000 00000000 00000000 00000100
                   02080030 00000000 00000000 00000000 00020000
compatible              pci10df,fc20
clock-frequency         02625a00
#size-cells             00000000
#address-cells          00000002
copyright               Copyright (c) 2005 Emulex
model                   LPe11002-S
name                    SUNW,emlxs
device_type             scsi-fcp
manufacturer            Emulex
fcode-version           1.50a8
fcode-rom-offset        0000c000
devsel-speed            00000000
class-code              000c0400
interrupts              00000001
latency-timer           00000000
cache-line-size         00000010
max-latency             00000000
min-grant               00000000
subsystem-id            0000fc22
subsystem-vendor-id     000010df
revision-id             00000002
device-id               0000fc20
vendor-id               000010df
{0} ok cd /pci@7c0/pci@0/pci@8/SUNW,emlxs@0,1
{0} ok .properties
```

```
assigned-addresses      82080110 00000000 03504000 00000000
00002000
                        82080118 00000000 03506000 00000000 00002000
                        81080120 00000000 00003100 00000000 00000100
                        82080130 00000000 03580000 00000000 00040000
port_wwn                10 00 00 00 c9 4b 3b 39
node_wwn                20 00 00 00 c9 4b 3b 39
alternate-reg           01080120 00000000 00000000 00000000
00000100
reg                     00080100 00000000 00000000 00000000 00000000
                        03080110 00000000 00000000 00000000 00001000
                        03080118 00000000 00000000 00000000 00000100
                        02080130 00000000 00000000 00000000 00020000
compatible              pci10df,fc20
clock-frequency         02625a00
#size-cells             00000000
#address-cells          00000002
copyright               Copyright (c) 2005 Emulex
model                   LPe11002-S
name                    SUNW,emlxs
device_type             scsi-fcp
manufacturer            Emulex
fcode-version           1.50a8
fcode-rom-offset        0000c000
devsel-speed            00000000
class-code              000c0400
interrupts              00000002
latency-timer           00000000
cache-line-size         00000010
max-latency             00000000
min-grant               00000000
subsystem-id            0000fc22
subsystem-vendor-id     000010df
revision-id             00000002
device-id               0000fc20
vendor-id               000010df
{0} ok
```

▼ To Verify Attached Storage to the Installed HBA

If online storage is connected to the HBA, use the `apply show-children` command
to list the attached storage.

In the example that follows, a storage JBOD has twelve targets attached to one port of the dual-ported HBA.

```
{0} ok apply show-children  /pci@7c0/pci@0/pci@9/SUNW,emlxs@0
Device  ALPA b6  WWPN 215000c0ff00223d
   LUN  0     ESI Device    SUN     StorEdge 3510F D1046
Link attention
Device  ALPA b9  WWPN 2100000c50c30555
   LUN  0     Disk     SEAGATE ST3146807FC     0006
Device  ALPA ba  WWPN 2100000c50c30525
   LUN  0     Disk     SEAGATE ST3146807FC     0006
Device  ALPA bc  WWPN 500000e010172831
   LUN  0     Disk     FUJITSU MAP3147F SUN146G0301
Device  ALPA c3  WWPN 2100000c50c3051b
   LUN  0     Disk     SEAGATE ST3146807FC     0006
Device  ALPA c5  WWPN 2100000c50c30567
   LUN  0     Disk     SEAGATE ST3146807FC     0006
Device  ALPA c6  WWPN 500000e0101727d1
   LUN  0     Disk     FUJITSU MAP3147F SUN146G0301
Device  ALPA c7  WWPN 21000004cf64f1db
   LUN  0     Disk     SEAGATE ST336752FSUN36G 0508
Device  ALPA c9  WWPN 2100000c50c30513
   LUN  0     Disk     SEAGATE ST3146807FC     0006
Device  ALPA ca  WWPN 500000e0101727b1
   LUN  0     Disk     FUJITSU MAP3147F SUN146G0301
Device  ALPA cb  WWPN 2100000c50c3050e
   LUN  0     Disk     SEAGATE ST3146807FC     0006
Device  ALPA cc  WWPN 21000004cf64dc04
   LUN  0     Disk     SEAGATE ST336752FSUN36G 0508
Device  ALPA cd  WWPN 21000004cf5728c0
   LUN  0     Disk     SEAGATE ST373307FSUN72G 0407
{0} ok
```

Note – You may need to use the reset-all command before entering apply show-children.

Installing the HBA Driver with the Solaris 10 OS

After you have completed the hardware installation and powered on the computer, follow these instructions to install the HBA driver with the Solaris 10 Operating System (OS) (SPARC Platform Edition).

You must first install the appropriate Sun Solaris 10 OS for your platform, then install the latest available Solaris 10 cluster patches.

Packages

Note – The following packages are required only for Solaris 10 03/05 and Solaris 10 HW1 releases. Any Solaris releases beyond these do not require the installation of these packages.

Perform the following steps to download the Solaris 10 packages.

1. **Go to the URL:**

   `http://www.sun.com/download/products.xml?id=42c4317d`

   The Products Download page is displayed.

2. **Under Platform, click Download.**

   The Login menu is displayed.

3. **Type your Username and Password and click Login.**

   The Download page is displayed with two items available in the table.

Description	File Name
Solaris 10 Sun StorEdge Enterprise 4Gb FC Single and Dual Port HBA, English	s10_emlxs_pkgs.tar.Z
Sun StorEdge Enterprise 4Gb FC Single and Dual Port Host Adapter README file, English	README_s10_emlxs_pkgs.txt

4. **Read the license agreement and accept or decline.**

5. **Click the download item that is appropriate for this 4 Gbit adapter**

   The following packages are contained in the zipped file:

- SUNWemlxs
- SUNWemlxu

6. **Click the second item and print these driver README installation instructions.**

7. **Follow the README instructions.**

Patches

Note – The installation of the following patch is required only for Solaris 10 releases up through Solaris Update 1 and Solaris 10 HW2.

Perform the following steps to download the Solaris 10 patches.

1. **Go to** `http://sunsolve.sun.com.`

   The SunSolve Online license agreement page is displayed.

2. **Accept the License Agreement.**

   The SunSolve Online page is displayed.

3. **Under Patches and Updates, click PatchFinder.**

4. **Download the following patch by typing the patch ID (without the dash number) in the Enter Patch ID box and click Find Patch.**
   - 120222-06 (or above) SunOS 5.10: Emulex-Sun Fibre LightPulse Channel Adapter driver

5. **Follow the instructions to install each patch.**

6. **Reboot your system after installing the patches.**

Sun Product Information Page at Emulex

The URL:

`http://www.emulex.com/ts/docoem/framsun/10k.htm`

is a master index page for Sun products. Click the appropriate link to go to the Download Page for the 4Gb adapters. This page contains supplementary information that is helpful to the user. Key highlights in this page are:

- Instructions to download the necessary Solaris drivers for this product.

- An FCA Utility Kit which contains the emlxadm utility for updating the Universal Boot Code on the HBA should such a need arise.
- Instructions for building a bootable device to support the booting from SAN for users of Soalris 10 release up through Solaris 10 Update 1, and Solaris 10 HW2.
- A download section for the currently released Universal Boot Code.

This page is updated periodically.

Diagnostic Support

Diagnostic support for the Sun StorageTek PCI Express Enterprise 4 Gb FC HBA Emulex is available with SunVTS™ 6.0 plus apply patch number 119838-03 or above.

Declaration of Conformity, Regulatory Compliance, and Safety Statements

This appendix contains the following information that applies to the Sun StorageTek PCI Express 4 Gb Fibre Channel Single and Dual Port Host Bus Adapter:

■ "Declaration of Conformity" on page 19

■ "Regulatory Compliance Statements" on page 21

■ "Safety Agency Compliance Statements" on page 25

Declaration of Conformity

Compliance Model Number: LPe-XXXX
Product Family Name: Emulex 4GB FC Single and Dual Port PCI-Express Host Bus Adapter
(SG-XPCIE1FC-EM4, SG-XPCIE2FC-EM4)

EMC

USA - FCC Class A

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This equipment may not cause harmful interference.

2) This equipment must accept any interference that may cause undesired operation.

European Union

This equipment complies with the following requirements of the EMC Directive 89/336/EEC:

As Telecommunication Network Equipment (TNE) in both Telecom Centers and Other Than Telecom Centers per (as applicable):EN 300 386 V1.3.2 (2003-05) Required Limits:

EN 55022:1994 +A1:1995 +A2:1997	Class A
EN 61000-3-2:2000	Pass
EN 61000-3-3:1995 +A1:2000	Pass
IEC 61000-4-2	6 kV (Direct), 8 kV (Air)
IEC 61000-4-3	3 V/m 80-1000MHz, 10 V/m 800-960 MHz and 1400-2000 MHz
IEC 61000-4-4	1 kV AC and DC Power Lines, 0.5 kV Signal Lines,
IEC 61000-4-5	2 kV AC Line-Gnd, 1 kV AC Line-Line and Outdoor Signal Lines, 0.5 kV Indoor Signal Lines > 10m.
IEC 61000-4-6	3 V
IEC 61000-4-11	Pass

As Information Technology Equipment (ITE) Class A per (as applicable):
EN 55022:1994 +A1:1995 +A2:1997Class A

EN 61000-3-2:2000	Pass
EN 61000-3-3:1995 +A1:2000	Pass
EN 55024:1998 +A1: 2001 +A2:2003 Required Limits:	
IEC 61000-4-2	4 kV (Direct), 8 kV (Air)
IEC 61000-4-3	3 V/m
IEC 61000-4-4	1 kV AC Power Lines, 0.5 kV Signal and DC Power Lines
IEC 61000-4-5	1 kV AC Line-Line and Outdoor Signal Lines, 2 kV AC Line-Gnd, 0.5 kV DC Power Lines
IEC 61000-4-6	3 V
IEC 61000-4-8	1 A/m
IEC 61000-4-11	Pass

Safety: *This equipment complies with the following requirements of the Low Voltage Directive 73/23/EEC:*

EC Type Examination Certificates:

    EN 60950-1:2001, First Edition, +A11   TÜV Rheinland Certificate No. R 72050152

    IEC 60950-1:2001, 1st Edition   CB Scheme Certificate No. US/7598C/UL

    Evaluated to all CB Countries

    UL 60950-1:2003, 1st Edition, CSA C22.2 No. 60950-1-03   File: E133173-A1-UL-1

Supplementary Information:

    This equipment was tested and complies with all the requirements for the CE Mark.

    This equipment complies with the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC.

_____/S/_____   _____/S/_____

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Fax: 650-786-3723   Tel: +44 1 506 672 539
          Fax: +44 1 506 670 011

Regulatory Compliance Statements

Your Sun product is marked to indicate its compliance class:

- Federal Communications Commission (FCC) — USA
- Industry Canada Equipment Standard for Digital Equipment (ICES-003) — Canada
- Voluntary Control Council for Interference (VCCI) — Japan
- Bureau of Standards Metrology and Inspection (BSMI) — Taiwan

Please read the appropriate section that corresponds to the marking on your Sun product before attempting to install the product.

FCC Class A Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Modifications: Any modifications made to this device that are not approved by Sun Microsystems, Inc. may void the authority granted to the user by the FCC to operate this equipment.

FCC Class B Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications: Any modifications made to this device that are not approved by Sun Microsystems, Inc. may void the authority granted to the user by the FCC to operate this equipment.

ICES-003 Class A Notice - Avis NMB-003, Classe A

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

ICES-003 Class B Notice - Avis NMB-003, Classe B

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

VCCI 基準について

クラス A VCCI 基準について

クラス A VCCI の表示があるワークステーションおよびオプション製品は、クラスA情報技術装置です。これらの製品には、下記の項目が該当します。

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Graphic showing the Japanese VCCI-A regulatory statement

クラス B VCCI 基準について

クラス B VCCI の表示 VCI があるワークステーションおよびオプション製品は、クラス B 情報技術装置です。これらの製品には、下記の項目が該当します。

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。

Graphic showing the Japanese VCCI-B regulatory statement

BSMI Class A Notice

The following statement is applicable to products shipped to Taiwan and marked as Class A on the product compliance label.

警告使用者：
這是甲類的資訊產品，在居住的環境中使用
時，可能會造成射頻 干擾，在這種情況下，
使用者會被要求採取某些適當的對策。

Graphic showing the BSMI Class A Notice for products shipped to Taiwan

D33012   T33012

Graphic showing the BMSI Declaration of Conformity mark

CCC Class A Notice

The following statement is applicable to products shipped to China and marked with "Class A" on the product's compliance label.

以下声明适用于运往中国且其认证标志上注有 "Class A" 字样的产品。

Graphic showing the Simplified Chinese translation of the English paragraph immediately above this graphic

声明
此为A级产品，在生活环境中，该产品可能会造成无线电干扰。
在这种情况下，可能需要用户 对其干扰采取切实可行的措施。

CCC S&E

Graphic showing the CCC Class A warning statement and the CCC logo

GOST-R Certification Mark

Graphic showing the GOST-R Certification Mark

Safety Agency Compliance Statements

Read this section before beginning any procedure. The following text provides safety precautions to follow when installing a Sun Microsystems product.

Safety Precautions

For your protection, observe the following safety precautions when setting up your equipment:

- Follow all cautions and instructions marked on the equipment.
- Ensure that the voltage and frequency of your power source match the voltage and frequency inscribed on the equipment's electrical rating label.
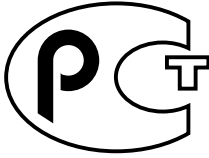- Never push objects of any kind through openings in the equipment. Dangerous voltages may be present. Conductive foreign objects could produce a short circuit that could cause fire, electric shock, or damage to your equipment.

Symbols

The following symbols may appear in this book:

Caution – There is a risk of personal injury and equipment damage. Follow the instructions.

Caution – Hot surface. Avoid contact. Surfaces are hot and may cause personal injury if touched.

Caution – Hazardous voltages are present. To reduce the risk of electric shock and danger to personal health, follow the instructions.

Depending on the type of power switch your device has, one of the following symbols may be used:

On – Applies AC power to the system.

Off – Removes AC power from the system.

Standby – The On/Standby switch is in the standby position.

Modifications to Equipment

Do not make mechanical or electrical modifications to the equipment. Sun Microsystems is not responsible for regulatory compliance of a modified Sun product.

Placement of a Sun Product

Caution – Do not block or cover the openings of your Sun product. Never place a Sun product near a radiator or heat register. Failure to follow these guidelines can cause overheating and affect the reliability of your Sun product.

Noise Level

In compliance with the requirements defined in DIN 45635 Part 1000, the workplace-dependent noise level of this product is less than 70 db(A).

SELV Compliance

Safety status of I/O connections comply to SELV requirements.

Power Cord Connection

Caution – Sun products are designed to work with power systems having a grounded neutral (grounded return for DC-powered products). To reduce the risk of electric shock, do not plug Sun products into any other type of power system. Contact your facilities manager or a qualified electrician if you are not sure what type of power is supplied to your building.

Caution – Not all power cords have the same current ratings. Do not use the power cord provided with your equipment for any other products or use. Household extension cords do not have overload protection and are not meant for use with computer systems. Do not use household extension cords with your Sun product.

注意 – 添付の電源コードを他の装置や用途に使用しない
添付の電源コードは本装置に接続し、使用することを目的として設計され、その安全性が確認されているものです。決して他の装置や用途に使用しないでください。火災や感電の原因となる恐れがあります。

The following caution applies only to devices with a Standby power switch:

Caution – The power switch of this product functions as a standby type device only. The power cord serves as the primary disconnect device for the system. Be sure to plug the power cord into a grounded power outlet that is nearby the system and is readily accessible. Do not connect the power cord when the power supply has been removed from the system chassis.

The following caution applies only to devices with multiple power cords:

Caution – For products with multiple power cords, all power cords must be disconnected to completely remove power from the system.

Battery Warning

Caution – There is danger of explosion if batteries are mishandled or incorrectly replaced. On systems with replaceable batteries, replace only with the same manufacturer and type or equivalent type recommended by the manufacturer per the instructions provided in the product service manual. Do not disassemble batteries or attempt to recharge them outside the system. Do not dispose of batteries in fire. Dispose of batteries properly in accordance with the manufacturer's instructions and local regulations. Note that on Sun CPU boards, there is a lithium battery molded into the real-time clock. These batteries are not customer replaceable parts.

System Unit Cover

You must remove the cover of your Sun computer system unit to add cards, memory, or internal storage devices. Be sure to replace the cover before powering on your computer system.

Caution – Do not operate Sun products without the cover in place. Failure to take this precaution may result in personal injury and system damage.

Rack System Warning

The following warnings apply to Racks and Rack Mounted systems.

⚠ **Caution –** For safety, equipment should always be loaded from the bottom up. That is, install the equipment that will be mounted in the lowest part of the rack first, then the next higher systems, etc.

⚠ **Caution –** To prevent the rack from tipping during equipment installation, the anti-tilt bar on the rack must be deployed.

♨ **Caution –** To prevent extreme operating temperature within the rack insure that the maximum temperature does not exceed the product's ambient rated temperatures.

♨ **Caution –** To prevent extreme operating temperatures due to reduced airflow consideration should be made to the amount of air flow that is required for a safe operation of the equipment.

Laser Compliance Notice

Sun products that use laser technology comply with Class 1 laser requirements.

> Class 1 Laser Product
> Luokan 1 Laserlaite
> Klasse 1 Laser Apparat
> Laser Klasse 1

CD and DVD Devices

The following caution applies to CD, DVD, and other optical devices.

⚠ **Caution –** Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

Conformité aux normes de sécurité

Veuillez lire attentivement cette section avant de commencer. Ce texte traite des mesures de sécurité qu'il convient de prendre pour l'installation d'un produit Sun Microsystems.

Mesures de sécurité

Pour votre sécurité, nous vous recommandons de suivre scrupuleusement les mesures de sécurité ci-dessous lorsque vous installez votre matériel:

- Suivez tous les avertissements et toutes les instructions inscrites sur le matériel.
- Assurez-vous que la tension et la fréquence de votre source d'alimentation correspondent à la tension et à la fréquence indiquées sur l'étiquette de la tension électrique nominale du matériel
- N'introduisez jamais d'objets quels qu'ils soient dans les ouvertures de l'équipement. Vous pourriez vous trouver en présence de hautes tensions dangereuses. Tout objet étranger conducteur risque de produire un court-circuit pouvant présenter un risque d'incendie ou de décharge électrique, ou susceptible d'endommager le matériel.

Symboles

Vous trouverez ci-dessous la signification des différents symboles utilisés:

⚠ **Attention –** Vous risquez d'endommager le matériel ou de vous blesser. Veuillez suivre les instructions.

♨ **Attention –** Surfaces brûlantes. Evitez tout contact. Les surfaces sont brûlantes. Vous risquez de vous blesser si vous les touchez.

Selon le type d'interrupteur marche/arrêt dont votre appareil est équipé, l'un des symboles suivants sera utilisé:

| **Marche –** Met le système sous tension alternative.

O   **Arret –** Met le système hors tension alternative.

⏻   **Veilleuse –**

Positionnement d'un produit Sun

Attention – Evitez d'obstruer ou de recouvrir les orifices de votre produit Sun. N'installez jamais un produit Sun près d'un radiateur ou d'une source de chaleur. Si vous ne respectez pas ces consignes, votre produit Sun risque de surchauffer et son fonctionnement en sera altéré.

Niveau de pression acoustique

Le niveau de pression acoustique du lieu de travail définie par la norme DIN 45 635 Part 1000 doit être au maximum de 70 db(A).

Conformité SELV

Le niveau de sécurité des connexions E/S est conforme aux normes SELV.

Connexion du cordon d'alimentation

Les produits Sun sont conçus pour fonctionner avec des systèmes d'alimentation équipés d'un conducteur neutre relié à la terre (conducteur neutre pour produits alimentés en CC). Pour réduire les risques de décharge électrique, ne branchez jamais les produits Sun sur une source d'alimentation d'un autre type. Contactez le gérant de votre bâtiment ou un électricien agréé si vous avez le moindre doute quant au type d'alimentation fourni dans votre bâtiment.

Tous les cordons d'alimentation ne présentent pas les mêmes caractéristiques électriques. Les cordons d'alimentation à usage domestique ne sont pas protégés contre les surtensions et ne sont pas conçus pour être utilisés avec des ordinateurs. N'utilisez jamais de cordon d'alimentation à usage domestique avec les produits Sun.

L'avertissement suivant s'applique uniquement aux systèmes équipés d'un interrupteur Veille:

L'interrupteur d'alimentation de ce produit fonctionne uniquement comme un dispositif de mise en veille. Le cordon d'alimentation constitue le moyen principal de déconnexion de l'alimentation pour le système. Assurez-vous de le brancher dans une prise d'alimentation mise à la terre près du système et facile d'accès. Ne le branchez pas lorsque l'alimentation électrique ne se trouve pas dans le châssis du système.

L'avertissement suivant s'applique uniquement aux systèmes équipés de plusieurs cordons d'alimentation:

Pour mettre un système équipé de plusieurs cordons d'alimentation hors tension, il est nécessaire de débrancher tous les cordons d'alimentation.

Mise en garde relative aux batteries

⚠ Les batteries risquent d'exploser en cas de manipulation maladroite ou de remplacement incorrect. Pour les systèmes dont les batteries sont remplaçables, effectuez les remplacements uniquement selon le modèle du fabricant ou un modèle équivalent recommandé par le fabricant, conformément aux instructions fournies dans le manuel de service du système. N'essayez en aucun cas de démonter les batteries, ni de les recharger hors du système. Ne les jetez pas au feu. Mettez-les au rebut selon les instructions du fabricant et conformément à la législation locale en vigueur. Notez que sur les cartes processeur de Sun, une batterie au lithium a été moulée dans l'horloge temps réel. Les batteries ne sont pas des pièces remplaçables par le client.

Couvercle de l'unité

Pour ajouter des cartes, de la mémoire ou des périphériques de stockage internes, vous devez retirer le couvercle de votre système Sun. Remettez le couvercle supérieur en place avant de mettre votre système sous tension.

⚠ Ne mettez jamais des produits Sun sous tension si leur couvercle supérieur n'est pas mis en place. Si vous ne prenez pas ces précautions, vous risquez de vous blesser ou d'endommager le système.

Mise en garde relative au système en rack

La mise en garde suivante s'applique aux racks et aux systèmes montés en rack.

⚠ Pour des raisons de sécurité, le matériel doit toujours être chargé du bas vers le haut. En d'autres termes, vous devez installer, en premier, le matériel qui doit se trouver dans la partie la plus inférieure du rack, puis installer le matériel sur le niveau suivant, etc.

⚠ Afin d'éviter que le rack ne penche pendant l'installation du matériel, tirez la barre anti-basculement du rack.

♨ Pour éviter des températures de fonctionnement extrêmes dans le rack, assurez-vous que la température maximale ne dépasse pas la fourchette de températures ambiantes du produit déterminée par le fabricant.

♨ Afin d'empêcher des températures de fonctionnement extrêmes provoquées par une aération insuffisante, assurez-vous de fournir une aération appropriée pour un fonctionnement du matériel en toute sécurité

Avis de conformité des appareils laser

Les produits Sun qui font appel aux technologies lasers sont conformes aux normes de la classe 1 en la matière.

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Class 1 Laser Product
Luokan 1 Laserlaite
Klasse 1 Laser Apparat
Laser Klasse 1
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Périphériques CD et DVD

L'avertissement suivant s'applique aux périphériques CD, DVD et autres périphériques optiques:

⚠ L'utilisation de contrôles et de réglages ou l'application de procédures autres que ceux spécifiés dans le présent document peuvent entraîner une exposition à des radiations dangereuses.

Einhaltung sicherheitsbehördlicher Vorschriften

Lesen Sie vor dem Ausführen von Arbeiten diesen Abschnitt. Im folgenden Text werden Sicherheitsvorkehrungen beschrieben, die Sie bei der Installation eines Sun Microsystems-Produkts beachten müssen.

Sicherheitsvorkehrungen

Treffen Sie zu Ihrem eigenen Schutz bei der Installation des Geräts die folgenden Sicherheitsvorkehrungen:

Beachten Sie alle auf den Geräten angebrachten Warnhinweise und Anweisungen.

Stellen Sie sicher, dass Spannung und Frequenz der Stromversorgung den Nennleistungen auf dem am Gerät angebrachten Etikett entsprechen.

Führen Sie niemals Fremdobjekte in die Öffnungen am Gerät ein. Es können gefährliche Spannungen anliegen. Leitfähige Fremdobjekte können einen Kurzschluss verursachen, der einen Brand, Stromschlag oder Geräteschaden herbeiführen kann.

Symbole

Die Symbole in diesem Handbuch haben folgende Bedeutung:

Achtung – Gefahr von Verletzung und Geräteschaden. Befolgen Sie die Anweisungen.

Achtung – Heiße Oberfläche. Nicht berühren, da Verletzungsgefahr durch heiße Oberfläche besteht.

Gefährliche Spannungen. Befolgen Sie die Anweisungen, um Stromschläge und Verletzungen zu vermeiden.

Je nach Netzschaltertyp an Ihrem Gerät kann eines der folgenden Symbole verwendet werden:

Ein –

Aus–

Wartezustand –

Modifikationen des Geräts

Nehmen Sie keine elektrischen oder mechanischen Gerätemodifikationen vor. Sun Microsystems ist für die Einhaltung der Sicherheitsvorschriften von modifizierten Sun-Produkten nicht haftbar.

Aufstellung von Sun-Geräten

Geräteöffnungen Ihres Sun-Produkts dürfen nicht blockiert oder abgedeckt werden. Sun-Geräte sollten niemals in der Nähe von Heizkörpern oder Heißluftklappen aufgestellt werden. Die Nichtbeachtung dieser Richtlinien kann Überhitzung verursachen und die Zuverlässigkeit Ihres Sun-Geräts beeinträchtigen.

Lautstärke

Gemäß den in DIN 45 635 Teil 1000 definierten Vorschriften beträgt die arbeitsplatzbedingte Lautstärke dieses Produkts weniger als 70 dB(A).

SELV-Konformität

Der Sicherheitsstatus der E/A-Verbindungen entspricht den SELV-Anforderungen.

Anschluss des Netzkabels

Sun-Geräte sind für Stromversorgungssysteme mit einem geerdeten neutralen Leiter (geerdeter Rückleiter bei gleichstrombetriebenen Geräten) ausgelegt. Um die Gefahr von Stromschlägen zu vermeiden, schließen Sie das Gerät niemals an andere Stromversorgungssysteme an. Wenden Sie sich an den zuständigen Gebäudeverwalter oder an einen qualifizierten Elektriker, wenn Sie nicht sicher wissen, an welche Art von Stromversorgungssystem Ihr Gebäude angeschlossen ist.

Nicht alle Netzkabel verfügen über die gleichen Nennwerte. Herkömmliche, im Haushalt verwendete Verlängerungskabel besitzen keinen Überlastschutz und sind daher für Computersysteme nicht geeignet. Verwenden Sie bei Ihrem Sun-Produkt keine Haushalts-Verlängerungskabel.

Die folgende Warnung gilt nur für Geräte mit Standby-Netzschalter:

Beim Netzschalter dieses Geräts handelt es sich nur um einen Ein/Standby-Schalter. Zum völligen Abtrennen des Systems von der Stromversorgung dient hauptsächlich das Netzkabel. Stellen Sie sicher, dass das Netzkabel an eine frei zugängliche geerdete Steckdose in der Nähe des Systems angeschlossen ist. Schließen Sie das Stromkabel nicht an, wenn die Stromversorgung vom Systemchassis entfernt wurde.

Die folgende Warnung gilt nur für Geräte mit mehreren Netzkabeln:

Bei Produkten mit mehreren Netzkabeln müssen alle Netzkabel abgetrennt werden, um das System völlig von der Stromversorgung zu trennen.

Warnung bezüglich Batterien

Bei unsachgemäßer Handhabung oder nicht fachgerechtem Austausch der Batterien besteht Explosionsgefahr. Verwenden Sie bei Systemen mit austauschbaren Batterien ausschließlich Ersatzbatterien desselben Typs und Herstellers bzw. einen entsprechenden, vom Hersteller gemäß den Anweisungen im Service-Handbuch des Produkts empfohlenen Batterietyp. Versuchen Sie nicht, die Batterien auszubauen oder außerhalb des Systems wiederaufzuladen. Werfen Sie die Batterien nicht ins Feuer. Entsorgen Sie die Batterien entsprechend den Anweisungen des Herstellers und den vor Ort geltenden Vorschriften. CPU-Karten von Sun verfügen über eine Echtzeituhr mit integrierter Lithiumbatterie. Diese Batterie darf nur von einem qualifizierten Servicetechniker ausgewechselt werden.

Gehäuseabdeckung

Sie müssen die Abdeckung Ihres Sun-Computersystems entfernen, um Karten, Speicher oder interne Speichergeräte hinzuzufügen. Bringen Sie vor dem Einschalten des Systems die Gehäuseabdeckung wieder an.

Nehmen Sie Sun-Geräte nicht ohne Abdeckung in Betrieb. Die Nichtbeachtung dieses Warnhinweises kann Verletzungen oder Geräteschaden zur Folge haben.

Warnungen bezüglich in Racks eingebauter Systeme

Die folgenden Warnungen gelten für Racks und in Racks eingebaute Systeme:

Aus Sicherheitsgründen sollten sämtliche Geräte von unten nach oben in Racks eingebaut werden. Installieren Sie also zuerst die Geräte, die an der untersten Position im Rack eingebaut werden, gefolgt von den Systemen, die an nächsthöherer Stelle eingebaut werden, usw.

Verwenden Sie beim Einbau den Kippschutz am Rack, um ein Umkippen zu vermeiden.

Um extreme Betriebstemperaturen im Rack zu vermeiden, stellen Sie sicher, dass die Maximaltemperatur die Nennleistung der Umgebungstemperatur für das Produkt nicht überschreitet

Um extreme Betriebstemperaturen durch verringerte Luftzirkulation zu vermei-den, sollte die für den sicheren Betrieb des Geräts erforderliche Luftzirkulation eingesetzt werden.

Hinweis zur Laser-Konformität

Sun-Produkte, die die Laser-Technologie verwenden, entsprechen den Laser-Anforderungen der Klasse 1.

Class 1 Laser Product
Luokan 1 Laserlaite
Klasse 1 Laser Apparat
Laser Klasse 1

CD- und DVD-Geräte

Die folgende Warnung gilt für CD-, DVD- und andere optische Geräte:

Die hier nicht aufgeführte Verwendung von Steuerelementen, Anpassungen oder Ausführung von Vorgängen kann eine gefährliche Strahlenbelastung verursachen.

Normativas de seguridad

Lea esta sección antes de realizar cualquier operación. En ella se explican las medidas de seguridad que debe tomar al instalar un producto de Sun Microsystems.

Medidas de seguridad

Para su protección, tome las medidas de seguridad siguientes durante la instalación del equipo:

Siga todos los avisos e instrucciones indicados en el equipo.

Asegúrese de que el voltaje y frecuencia de la fuente de alimentación coincidan con el voltaje y frecuencia indicados en la etiqueta de clasificación eléctrica del equipo.

No introduzca objetos de ningún tipo por las rejillas del equipo, ya que puede quedar expuesto a voltajes peligrosos. Los objetos conductores extraños pueden producir cortocircuitos y, en consecuencia, incendios, descargas eléctricas o daños en el equipo.

Símbolos

En este documento aparecen los siguientes símbolos:

Precaución –

Precaución –
contacto. Las superficies están calientes y pueden causar lesiones personales si se tocan.

Voltaje peligroso. Para reducir el riesgo de descargas eléctricas y lesiones personales, siga las instrucciones.

Apagado –

Espera –

Colocación de un producto Sun

No obstruya ni tape las rejillas del producto Sun. Nunca coloque un producto Sun cerca de radiadores ni fuentes de calor. Si no sigue estas indicaciones, el producto Sun podría sobrecalentarse y la fiabilidad de su funcionamiento se vería afectada.

Nivel de ruido

De conformidad con los requisitos establecidos en el apartado 1000 de la norma DIN 45635, el nivel de ruido en el lugar de trabajo producido por este producto es menor de 70 db(A).

Cumplimiento de la normativa para instalaciones SELV

Las condiciones de seguridad de las conexiones de entrada y salida cumplen los requisitos para instalaciones SELV (del inglés *Safe Extra Low Voltage*

la utilización de láser

Los productos Sun que utilizan tecnología láser cumplen los requisitos establecidos para los productos láser de clase 1.

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Class 1 Laser Product
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Dispositivos de CD y DVD

La siguiente medida se aplica a los dispositivos de CD y DVD, así como a otros dispositivos ópticos:

⚠ La utilización de controles, ajustes o procedimientos distintos a los aquí especificados puede dar lugar a niveles de radiación peligrosos.

Nordic Lithium Battery Cautions

Norge

⚠ **Advarsel –**

returneres apparatleverandøren.

Sverige

⚠ Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

Danmark

⚠ **Advarsel! –** ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Suomi

⚠ Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.